

**THE EFFECT OF *Abelmoschus esculentus* ETHANOLIC EXTRACT  
OF LEYDIG CELLS NUMBER ON  
*Mus musculus* TESTICLE**

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**ABSTRACT**

This research aimed to investigate the effect of *Abelmoschus esculentus* ethanolic extract for Leydig cells number on *Mus Musculus* testicle. Twenty four male *Mus musculus* were divided into four groups, each treatment group included six *Mus musculus* and administered through orally for 52 days. The treatments were group C (CMC-Na 0.5%), group T1 (200 mg/kgBW/day of *Abelmoschus esculentus* ethanolic extract), group T2 (400 mg/kgBW/day of *Abelmoschus esculentus* ethanolic extract) and group T3 (800 mg/kgBW/day of *Abelmoschus esculentus* ethanolic extract). After all the treatments for 52 days consecutively, all *Mus musculus* were sacrificed and right testicle were collected. Testicle tissues were processed using Hematoxylin-Eosin staining. Histopathological evaluation was done by calculating the number of Leydig cells by using microscope with 400x magnification. The data was analyzed by using One Way Annova and Duncan's test. The research results showed significant difference ( $p < 0.05$ ) among all the treatment groups. Based on research that has been done, it can be concluded that *Abelmoschus esculentus* ethanolic extract can decrease the number of Leydig cells. The decrease in the number of Leydig cells is showed by the presence of normal and necrosis Leydig cells.

**Keywords:** *Abelmoschus esculentus*, *Mus Musculus*, Testicle, Leydig cells